

Transcribed copy of Attachment B to the Declaration of
Gerald Gontarz under 37 C.F.R. §1.131

Li Medical Spinal Nucleus

Date

Will now make " melt extrudable" type aquacryl in order to make a spinal nucleus that has a shape memory. Using 89 % w.c. aquacryl as a base will cast long strips, coagulate, then wash in saline. These will be equilibrated in 10% NaSCN, then concentrated as follows:

| AQUACRYL COMPOSITION: | | | | Part. coefficient r | | |
|-----------------------|-----------------------|------------|-------------|---------------------|----------|-------|
| Date | Initial water content | 89.00% | | Swelling solution | | NaSCN |
| | at NaCl concentration | 0.9% | | NaSCN | conc | 10.0% |
| | | | NaSCN | water | | |
| | Weight | Polymer w | w2 | weight | weight | |
| Initial state: | 342.80 | 37.89 | 0.1100 | | | |
| Swollen state: | 263.81 | 37.89 | 0.1429 | 22.6124 | 241.0547 | |
| | | Liquid wt. | Target wt. | Pol. conc: | | |
| Target concentration | 45.0% | 50.24978 | 87.94 | 42.9% | 71.2 | 11.74 |
| | 50.0% | 45.2248 | 82.91 | 45.5% | | |
| | 55.0 % | 41.11345 | 78.80 | 47.8% | | |
| | 60.0% | 37.68733 | 75.37 | 50.0% | | |
| | | | | | | |
| | Will evaporate | 175.87 | g of water | | | |
| | By adding | 606.4826 | g of silica | | | |

I will shape these into spirals and heat to 100°C for 15 minutes in order to instill a shape. This will be washed and plasticized as normal procedures. Samples saved as JG-9-107-A.

Medical Spinal Nucleus

Will now make "melt extrudable" type aquacryl in order to make a spinal nucleus that has a shape memory. Using 88% w.c. aquacryl as a base will cross link, drip, crystallize, then wash in saline. There will be equilibrated in 10% NaCN, then concentrated as follows:

| AQUACRYL COMPOSITION: | | | | Net weight of: | |
|-----------------------|------------------------|------------|----------------------|-----------------|--------------|
| | Initial water content: | 88.00% | | NaSCN solution: | NaSCN |
| | at NaCl concentration: | 0.9% | | NaSCN conc: | 80.0% |
| | Weight | Polymer w | w2 | NaSCN weight | Water weight |
| Initial state: | 342.60 | 37.80 | 0.1100 | | |
| Swollen state: | 253.81 | 37.69 | 0.1429 | 22.6124 | 241.0547 |
| | | Liquid wt. | Target wt. | Pol. conc: | |
| Target concentration: | 45.0% | 50.24078 | 87.04 | 42.8% | |
| | 50.0% | 45.2248 | 82.91 | 45.5% | |
| Target: | 55.0% | 41.11345 | 78.80 | 47.6% | |
| | 60.0% | 37.68733 | 75.37 | 50.0% | |
| | Will evaporate | | 175.87 g of water | | |
| | By soaking | | 608.4825 g of silica | | |

It will shape these into fibers and heat to 100°C for 15 minutes in order to instill a shape. This will be washed and plasticized as normal procedures.
 Sample saved as JG-107-A